(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number
WO 2004/100044 A1

(51) International Patent Classification[7]: G06F 19/00, A63C 19/00

(21) International Application Number: PCT/SE2004/000704

(22) International Filing Date: 7 May 2004 (07.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

| | | |
|---|---|---|
| 0301332-3 | 7 May 2003 (07.05.2003) | SE |
| 0301331-5 | 7 May 2003 (07.05.2003) | SE |
| 60/468,652 | 8 May 2003 (08.05.2003) | US |
| 60/468,653 | 8 May 2003 (08.05.2003) | US |


(71) Applicant (*for all designated States except US*): EVENZO AB [SE/SE]; Triewaldsgränd 2, S-111 29 Stockholm (SE).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): PERSSON, Thord [SE/SE]; Stenhagsvägen 61 C, S-184 33 Åkersberga (SE). ZANDERLEHN, Karri [SE/SE]; Åsberga, Västergård, S-592 92 Vadstena (SE).

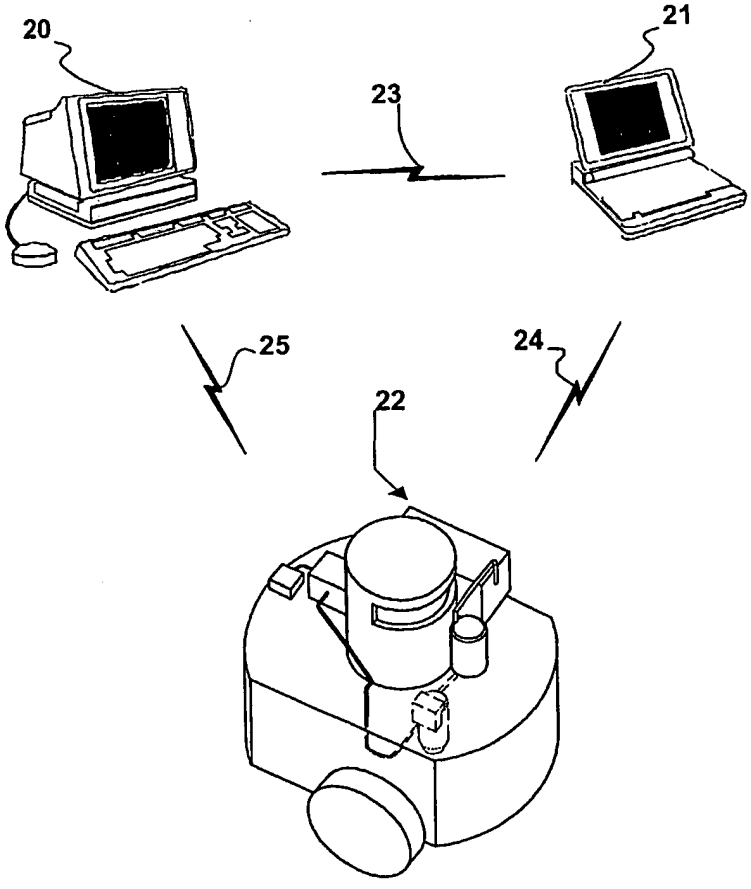
(74) Agent: STRÖM & GULLIKSSON IPC AB; P.O. Box 4188, S-203 13 Malmö (SE).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

*[Continued on next page]*

(54) Title: MARKING OF LARGE SURFACES WITH VISUAL PRESENTATIONS




(57) Abstract: A system, method and computer-readable medium for creating visual presentations on large surfaces such as sports fields or road surfaces both indoors and outdoors by means of a free-roaming marking device such as a mobile robot. The mobile robot is a remotely programmable, self-propelled robot, which autonomously and automatically performs the creation of at least one contour line of a visual presentation on large surfaces by treating the surfaces by travelling along a set of trajectories. The visual presentations are automatically generated by automatic calculation of trajectories to travel by the robot for generating the visual presentation. The visual presentations to be generated are scalable and deliver thus high quality visual presentations independently of the size of the presentation to be created. Fast production time of the visual presentations is ensured in combination with high quality and optimisation of the visual presentation for TV-broadcast.

WO 2004/100044 A1

ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**
— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*